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The Tribune
VOICE OF THE PEOPLE

Tue, 21 Aug 2018

Army floats tender for 41,000 LMGs

By Ajay Banerjee

In a major change of weaponry for the Army, a tender was issued today seeking supply of some 41,000 new light machine guns (LMGs) to equip its infantry battalions.

This is the first change of an LMG—basic weapon of infantry units— in the Army's armoury in two decades. A request for information (RFI), the first step of a tender, looking for additional vendors was issued today, complete with details of requirements.

The RFI was first issued in October last, but the parameters on its numbers, method of sourcing, firing capabilities, etc, were issued today after the Defence Acquisition Council (DAC) okayed the need for 40,949 LMGs. Of these, 30,712 will sourced from private Indian industry and another 10,237 from the Ordnance Factory Board. The indent to OFB will be placed after successful completion of trials.

The 7.62x51 mm LMGs are to be procured under the 'Buy and Make Indian' category.

The Tribune
VOICE OF THE PEOPLE

Tue, 21 Aug 2018

Navy, Army partner outside naval base for the first time

For the first time, the Indian Navy has affiliated with an Army regiment outside the naval base. The Jammu and Kashmir Light Infantry (JAKLI) has been affiliated with frontline warship INS Kochi. "It is for the first time that a naval unit and an Army regiment are entering into this kind of affiliation outside a naval base, and, therefore, this is the first step and is going to strengthen our joint manship," Vice Admiral Girish Luthra, Flag Officer Commanding-in-Chief, Western Naval Command, told reporters after the affiliation ceremony at the JAKLI Centre at Rangreth on the outskirts of Srinagar on Monday.

While terming it a historic day, Vice Admiral Luthra said personnel from the JALKI would visit ships of the Navy unit and also sail them. "Similarly, our personnel from INS Kochi will visit their various locations and learn about the functioning of various JAKLI battalions. This will promote better understanding and synergy between the two services," he said. The affiliation ceremony took place at the JAKLI Regimental Centre and was attended by dignitaries from the tri-services.

INS Kochi is the second ship of the indigenously designed and constructed Kolkata-class guided-missile destroyers built by the Mazagon Dock Limited at Mumbai. She is named after the vibrant port city of Kochi and is packed with the state-of-the-art weapons and sensors.

Srinagar-based defence spokesman Colonel Rajesh Kalia said the JAKLI Regiment was earlier affiliated to INS Ganga which was decommissioned in March 2018.

"To continue with this strong tradition of bonhomie and sharing of mutual understanding for culture and combat potential, the need was felt to identify a Naval Combat Unit. Both JAKLI and INS Kochi are indigenous. Indeed 'Kashmir se Kanyakumari tak' we sail together and defend the nation," the spokesman said. A similar affiliation was formed between the JAKLI Regimental Centre and the 51 Squadron of the Air Force.

दैनिक जागरण

Tue, 21 Aug 2018

दुश्मनों के टैंक को रात के अंधेरे में भी कर देंगे ध्वस्त

जागरण संवाददाता, जयपुर : अब दुश्मनों के टैंक को रात के अंधेरे में भी ध्वस्त किया जा सकेगा। दरअसल, टैंक भेदी स्वदेशी मिसाइल हेलिना के अपग्रेड वर्जन का रविवार को पोखरण में सफल परीक्षण किया गया। साल के अंत तक यह सेना में शामिल हो जाएगी। इसकी खूबी यह है कि यह रात में भी लक्ष्य पर सटीक निशाना लगाने में सक्षम है। राजस्थान के जैसलमेर जिले की पोखरण फायरिंग रेंज में रविवार को एंटी टैंक स्वदेशी मिसाइल हेलिना के अपग्रेड वर्जन का सफल परीक्षण किया गया। नाग श्रेणी की इस मिसाइल को लड़ाकू हेलीकॉप्टर से दागा गया। पांच से आठ किलोमीटर रेंज की इस मिसाइल ने अपने लक्ष्य को सफलतापूर्वक ध्वस्त कर दिया। इसे फायर एंड फॉरगेट (दागो और भूल जाओ) का दर्जा प्राप्त है। इस साल के अंत तक इस मिसाइल को सेना में शामिल कर लिया जाएगा । हेलिना का तीन साल पहले भी परीक्षण किया गया था, लेकिन तब यह तीन में से दो लक्ष्य ही भेद पाई थी। इसके बाद इसमें कुछ और सुधार किए गए। इस बार इसने अपने दोनों लक्ष्यों को पूरी तरह ध्वस्त कर दिया। अब इसे विकसित करने और परीक्षण का काम पूरा हो गया है। अब यह सेना में शामिल होने के लिए तैयार है। मिसाइल के सफल परीक्षण पर रक्षामंत्री निर्मला सीतारमण ने सेना और परीक्षण से जुड़ी विंग को बधाई दी है।

नाग मिसाल की चार श्रेणी हैं। इनमें से नेमिका जंगी जहाज से दागी जाती है। हेलिना हेलीकॉप्टर से और दो अन्य कैटेगरी की मिसाइल एयरक्राफ्ट और कंधे पर रखकर दागी जा सकती हैं।

THE TIMES OF INDIA

Tue, 21 Aug 2018

India, Japan to boost def ties, hold drill in ’18

Japan Def Min in Delhi a day before Chinese counterpart

Defence Minister Nirmala Sitharaman and her Japanese counterpart Itsunori Onodera exchange mementos at South Block in New Delhi on Monday

New Delhi: India and Japan have decided to further expand their defence ties, with more bilateral combat exercises, military exchanges and toplevel visits as well as collaboration in maritime security and defence production, with an eye firmly on an aggressive and expansionist China. Towards this end, India and Japan will hold their first-ever joint Army exercise in the domain of counter-terrorism later this year, while cranking up the level of ongoing naval exercises and interactions, including those in the areas of anti-submarine warfare and mine counter-measures.

This was decided at the annual defence ministerial dialogue, with the delegations being led by Nirmala Sitharaman and her Japanese counterpart Itsunori Onodera, in New Delhi on Monday. While the Indian defence minister will visit Japan next year, the Japan Maritime Self-Defence Force (JMSDF) chief of staff will come here this November. The IAF chief, in turn, will visit Japan in December to discuss ways to strengthen cooperation between the two air forces.

The India-Japan meeting came a day before Chinese defence minister General Wei Fenghe begins his visit here from August 21 to 24. With China continuing to strong-arm its neighbours on territorial and maritime sovereignty claims in South and East China Seas, India and Japan discussed the current security situation in the Indo-Pacific region, which also included developments in the Korean Peninsula.

"The two ministers stressed the need to ensure peace and stability in the Indian and Pacific Oceans as part of the larger Indo-Pacific region. They also reaffirmed they have shared interests in expanding cooperation in the maritime security domain, said an official.

India and Japan also decided to enhance cooperative research in defence equipment and technology.

दैनिक जागरण

Tue, 21 Aug 2018

समुद्री रक्षा सहयोग बढ़ाएंगे भारत और जापान

नई दिल्ली, प्रेट्र : भारत और जापान ने समुद्री रक्षा सहयोग बढ़ाने का फैसला किया है। दोनों देशों ने हिंद और प्रशांत महासागर क्षेत्र में शांति और स्थिरता बनाए रखने के लिए मिलकर कार्य करने का निर्णय लिया है। इलाके में चीन की बढ़ती आक्रामकता को देखते हुए दोनों देशों के सहयोग बढ़ाने के इस फैसले को महत्वपूर्ण माना जा रहा है। रक्षा मंत्री निर्मला सीतारमण की अपने जापानी समकक्ष इसुनोरी ओनोडेरा के साथ सोमवार को हुई वार्ता में कई महत्वपूर्ण फैसले किए गए। रक्षा संबंधों को आगे बढ़ाने के लिए दोनों देशों की सेनाएं इस साल के अंत में संयुक्त अभ्यास करेंगी। दोनों देशों के बीच रक्षा संबंधों पर यह बातचीत चीन के रक्षा मंत्री वी फेंग की चार दिवसीय भारत यात्रा शुरू होने से एक दिन पहले हुई है।

यह जापान और भारत के विशेष वैश्विक रणनीतिक सहयोग का हिस्सा होगा। इसका उद्देश्य हिंद और प्रशांत महासागर क्षेत्र में निर्बाध आवागमन को बनाए रखना होगा।

दुश्मन पर कहर बरपाएगी जेकलाई

राज्य ब्यूरो, श्रीनगर : पाकिस्तानी कबाइलियों को मार भगाने के लिए कश्मीरियों द्वारा स्वेच्छा से गठित मलेशिया फौज, जो जम्मू कश्मीर लाइट इनफेंट्री (जेकलाई) बन चुकी है, अब कश्मीर के पहाड़ों से पार समुद्र की लहरों और आसमान में दुश्मन पर कहर बरपाती नजर आएगी। वह नौसेना और वायुसेना के साथ मिलकर युद्धक कार्रवाई करने से लेकर राहत अभियान भी संचालित करेगी। इस लक्ष्य की प्राप्ति के लिए सोमवार को जेकलाई के रेजिमेंटल सेंटर, भारतीय नौसेना के युद्धपोत कोच्चि और वायुसेना की 51 स्क्वाड्रन के बीच एक संबद्धता समारोह में सहमति बनी है।

आइएनएस कोच्चि पूरी तरह स्वदेशी युद्धपोत है और जेकलाई अंग्रेजों के समय की रेजिमेंट नहीं, बल्कि आजाद भारत में बनी फौजी यूनिट है। दोनों के बीच संबद्धता का मूल मंत्र कश्मीर से कन्याकुमारी तक 'हम साथ चलेंगे, साथ मिलकर राष्ट्र की रक्षा करेंगे' है। नौसेना के वाइस एडमिरल गिरीश लुथरा ने जेकलाई के साथ संबद्धता का जिक्र करते हुए कहा कि आज एक ऐतिहासिक दिन है।

DNA
DAILY NEWS & ANALYSIS

Tue, 21 Aug 2018

What a manned space mission will mean for the nation

By Vidya Sagar Reddy

India has cast a bold, new aspiration in space, one that requires coordination between various entities with a firm grip on critical technologies and programme management. After decades of independence and establishing space research in the country, the country has decided to launch a manned mission by 2022. The mission is truly a national effort and will improve the country's scientific potential, not to mention the positive impact on technical education. India will be the fourth country to achieve such a feat joining an exclusive club of United States, Russia and China.

In fact, when the United States and the then Soviet Union were racing for technological superiority by launching manned space missions, Vikram Sarabhai urged India to resist such temptations and concentrate on the societal applications of space. Human spaceflight continued to elude India since then but with occasional musings about it. The geopolitical situation of the 1970s compelled India to accept the Soviet Union's offer to launch an Indian astronaut – Rakesh Sharma to its space station.

There have been arguments for and against India committing itself to a manned mission based on technology spinoffs and societal challenges respectively. However, the space for these deliberations is constricted now with the formal announcement of the mission by India's prime minister. The mission set for the country now is to launch Indian astronauts from Indian soil using indigenously developed technologies, which ISRO assures is in place already.

The task of launching the manned spacecraft into the desired orbit between 300-400 km falls on GSLV Mark III, India's heaviest launch vehicle so far. The GSLV Mk-III which will be upgraded to include a semi-cryogenic engine to increase its payload capacity needs to be human rated for this mission. Before that, its overall credibility has to be improved by launching various satellites including the Chandrayaan-2 in 2019 and demo fights for the manned mission.

It is to be fitted with a crew escape system that whisks away the crew module in case of rocket failure. A pad abort test was conducted recently to test this capability. The crew module was also tested for its structural integrity a few years back which will be fitted with life support systems.

The initial mission requires the crew module to support three astronauts for a week in orbit. This will be a critical aspect as the astronauts can experience high levels of stress because of restricted movement in a small vessel while whizzing around the Earth at a high speed. The training process too is laden with high risks and therefore the initial missions will see experienced Indian Air Force pilots flying into space likewise Rakesh Sharma. The astronaut training could be obtained from the US or Russia which have well developed centres for the purpose and decades long experience. In fact, the US showed interest earlier in launching Indian astronauts as well as assisting ISRO with India's human spaceflight programme. Nevertheless, the US is still a valuable partner for this mission as India requires 24/7 situational awareness and communication with the manned spacecraft. The US possesses space tracking sensors spread around the globe that will be helpful in navigating the manned spacecraft in orbit filled with satellites and debris. Europe (especially France) and Russia are also welcoming partners for India's manned mission.

But for the question on societal benefits and careful mission management, private industry participation is the key. ISRO has been partnering with the industry for making rocket components and engines. It handheld a private industry consortium for Assembly, Integration

and Testing activities. Thisconsortium and two other partners were contracted recently to produce a total of 21 satellites in three years to cope with the rising demand. While industry participation is expected before the launch, the creation of products and technologies (spinoffs) based on data from the manned mission determines the extent to which the project has made economic sense.

ISRO will be submitting a project report with a budget request of Rs. 10,000 crore. The shape of the programme to come, spinoffs and continuity projects will have to be discussed. The project is expected to create at least 15,000 jobs. These are not necessarily new vacancies but upgrading the existing positions as the space agency gives out satellite and PSLV contracts to the private industry. Indeed, former ISRO Chairman A.S. Kiran Kumar has noted that privatization will help relieve ISRO personnel to work on new projects.

The manned mission will undergird the significant changes occurring at ISRO as it move towards newer technologies while privatising the existing, proven technologies. The budget and tight schedule allocated for the manned mission requires retaining the high skilled personnel and reorient them for the official mission. All these processes will be occurring simultaneously requiring high quality management. ISRO is given the political support it has been seeking for a few years to break through the routine with a new vision. What comes after the mission, how will the human spaceflight programme be expanded in the decades to come and India’s impact on international space affairs remains to be observed.

DNA
DAILY NEWS & ANALYSIS

Tue, 21 Aug 2018

First satellite to measure global winds set for launch

A satellite designed to measure Earth's global wind patterns is set to be hoisted into orbit Tuesday from the Arianespace launch site in French Guiana. The European Space Agency's (ESA) Aeolus mission -- named for the guardian of wind in Greek mythology -- promises to improve short-term weather forecasting and our understanding of manmade climate change. "Meteorologists urgently need reliable wind-profile data to improve accuracy," the ESA said in a statement. Tropical winds in particular are very poorly mapped because of the almost complete absence of direct observations.

Once in orbit, Aeolus can retrieve data from anywhere on the planet, include remote regions lacking ground-based weather stations.

The satellite will carry a large telescope measuring 1.5 metres (five feet) across, an ultra-sensitive receiver, and a Doppler wind lidar, nicknamed Aladin. The Doppler lidar transmits short, powerful pulses of laser light toward Earth in the ultraviolet spectrum. Particles in the air -- moisture, dust, gases -- scatter a small fraction of that light energy back to the transceiver, where it is collected and recorded.

The delay between the outgoing pulse and the so-called "backscattered" signal reveals the wind's direction, speed and distance travelled. Once per orbit, data is downloaded to a ground station in Svalbard, Norway. The 1,260-kilo (3,000-pound) payload will be hoisted into a 320-kilometre (200-mile) orbit on a Vega rocket, with lift-off scheduled for Tuesday at 21:00 GMT.

Aeolus will be the fifth of the ESA's planned Earth Explorer missions. Others already completed or in operation have measured Earth's gravity and geomagnetic fields, soil moisture, ocean salinity and frozen expanses collectively known as the cryosphere. The new mission will be Arianespace's 50th launch for the European Space Agency.

DNA
DAILY NEWS & ANALYSIS

Tue, 21 Aug 2018

Optimistic about Mars rover recovery, says NASA

NASA remains optimistic about reconnecting with the Mars Opportunity rover that has been silent for over two months due to a global dust storm enshrouding the red planet, even though the robotic explorer's operations are expected to be affected. Since the dust storm is "decaying" -- meaning more dust is falling out of the atmosphere than is being raised back into it -- skies might soon clear enough for the rover to recharge and attempt to "phone home", NASA said in a statement.

The US space agency had performed several studies on the state of the rovers batteries before the storm, and temperatures at its location. Since the batteries were in relatively good health before the storm, there's not likely to be too much degradation, NASA said. Dust storms tend to warm the environment the rover should have stayed warm enough to survive, according to the team which notes that they still have reason to be optimistic.

Dust storms on Mars block sunlight from reaching the surface, raising the level of a measurement called "tau." The higher the tau, the less sunlight is available; the last tau measured by Opportunity was 10.8 on June 10. To compare, an average tau for its location on Mars is usually 0.5. Engineers predict that Opportunity will need a tau of less than 2.0 before the solar-powered rover will be able to recharge its batteries. A wide-angle camera on NASA's Mars Reconnaissance Orbiter will watch for surface features to become visible as the skies clear. That will help scientists estimate the tau. Several times a week, engineers use NASA's Deep Space Network, which communicates between planetary probes and Earth, to attempt to talk with Opportunity. The massive DSN antennas ping the rover during scheduled "wake-up" times, and then search for signals sent from Opportunity in response.

In addition, NASA's Jet Propulsion Laboratory's radio science group uses special equipment on DSN antennas that can detect a wider range of frequencies.